

SSC2132T/SSC2132
ODN V100R007C02
Product Description

Issue **01**
Date **2012-7-15**

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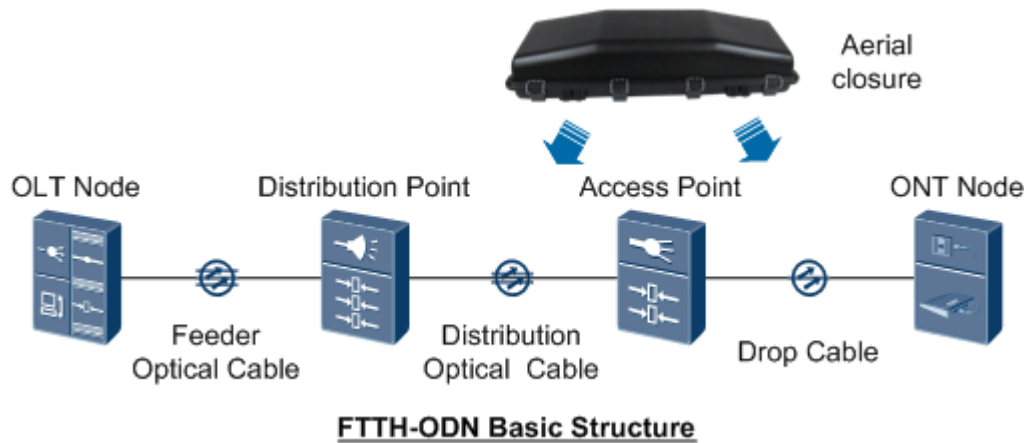
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1 Positioning

Mounted to the aerial optical cable the SSC2132T/SSC2132 free-breathing aerial closure (aerial closure for short) is mainly used in the fiber to the home-optical distribution network (FTTH-ODN) for optical splitting, distribution, branching connection, and straight-through storage. [Figure 1-1](#) shows the position of the aerial closure in a network.

Figure 1-1 Position of the aerial closure



2 Features

Flexible Configuration

- Various optical splitters
- Multiple split ratios
- Multiple splicing capacities
- Different cable diameters
- Various drop cables

Convenient Construction

- Tool-free closure opening or closing
- Tool-free drop cable securing
- Maintenance without tools
- Large operation space

Clear Routing

- Separated straight-through area and other areas by a flap
- Separated cable distribution area and splicing area

Reliable Protection

- IP54 protection rating
- Anti-ultraviolet (UV), anti-corrosion and anti-mildew material for the closure housing

3 Product Overview

3.1 Appearance

The appearance of SSC2132 series aerial closure is the same as that of SSC2132T series, [Figure 3-1](#) shows the appearance of the aerial closure.

Figure 3-1 Appearance of the aerial closure



1. Closure housing

2. Buckle

- The closure housing is made of anti-UV, anti-corrosion and anti-mildew high-performance plastic, meeting outdoor application requirements.
- The closure housing is buckled and can be opened or closed without any tools, facilitating construction.
- The closure housing supports an opening angle over 180 degrees, providing large operation space.

The aerial closure has four buckles at the front and two breathing holes at the rear. [Figure 3-2](#) shows the breathing holes.

Figure 3-2 Breathing hole and grounding port



1. Breathing hole

2. Grounding port

- The breathing holes are covered with metal grids, with a slice of sponges inside. The design helps prevent dust.
- After the aerial closure is installed, its breathing holes appear at the bottom. The closure also provides an internal flow guiding trough, effectively preventing condensation.

3.2 Structure

Function

With its modular design, the aerial closure can be configured with different function modules to achieve different functions. [Table 3-1](#) lists the functions of the aerial closure.

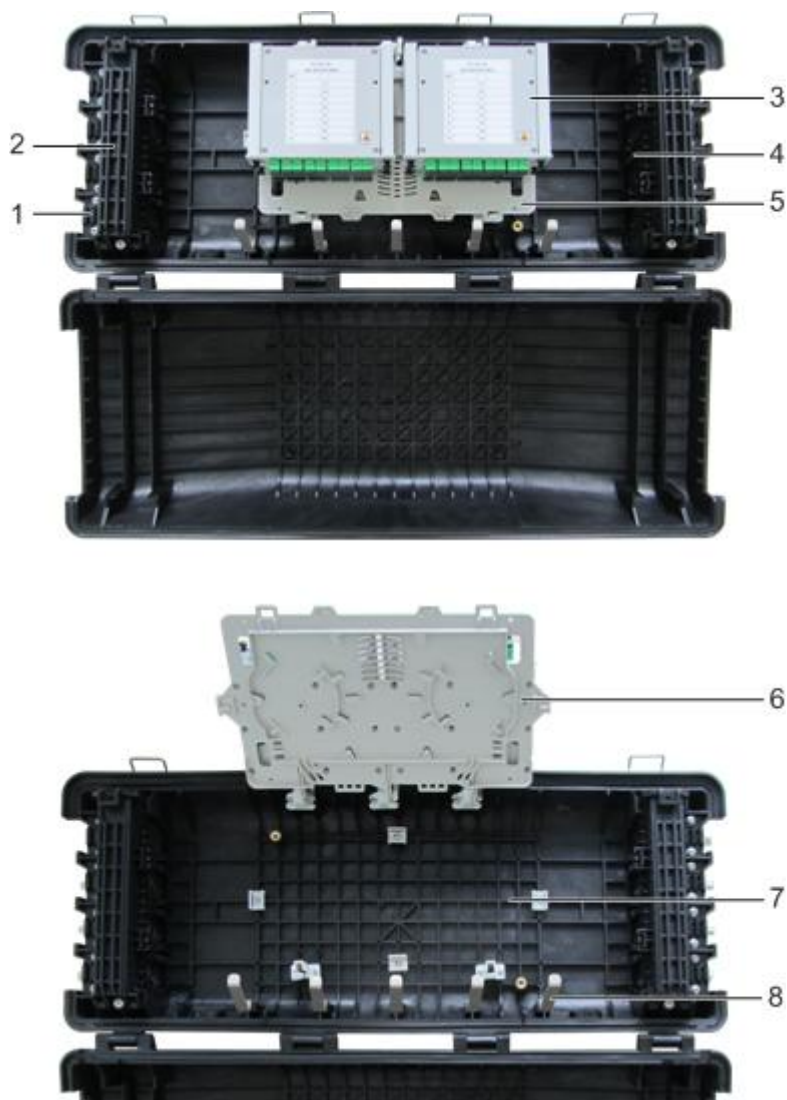
Table 3-1 Functions of the aerial closure

Model	SSC2132T Series	SSC2132 Series
Function module configured	<ul style="list-style-type: none"> • Bracket-mounted optical splitter • Splicing tray 	<ul style="list-style-type: none"> • Bare optical splitter • Splicing tray
Function	<ul style="list-style-type: none"> • Optical splitting • Cable distribution • Straight-through 	<ul style="list-style-type: none"> • Optical splitting • Splicing • Straight-through

SSC2132T Series

[Figure 3-3](#) shows the structure of the SSC2132T series aerial closure.

Figure 3-3 Structure of the SSC2132T series aerial closure



- | | | | |
|----------------------------|-----------------------------------|-------------------------------------|--|
| 1. Holes for common cables | 2. Pressure plate for drop cables | 3. Bracket-mounted optical splitter | 4. Installation position of device for fixing and stripping protection of optical cables |
| 5. Flap | 6. Splicing tray | 7. Straight-through area | 8. Fiber block pole |

- The aerial closure provides a splicing tray under the flap, and the splicing tray is used to splice and store the input ends of optical splitters and the pigtails.
- The operation space in the straight-through area is large enough for the coiled straight-through cables, facilitating storage of straight-through cables.

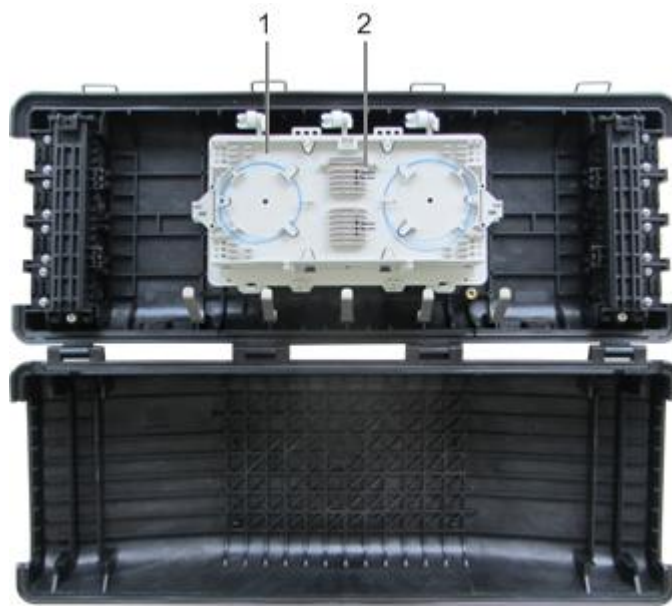
SSC2132 Series

 **NOTE**

The structure of the SSC2132 series aerial closure is similar to that of SSC2132T series. The common components of these two series are not described here.

Figure 3-4 shows the structure of the SSC2132 series aerial closure.

Figure 3-4 Structure of the SSC2132 series aerial closure



1. Splicing tray

2. Bare optical splitter

- The aerial closure provides a splicing tray under the flap.
- Splicing trays are buckled together, ensuring reliable connections and also facilitating removal.

3.3 Optical Splitter

The aerial closure supports the SPL2803 bracket-mounted optical splitter and the SPL9102 bare optical splitter. [Figure 3-5](#) shows the appearance of such optical splitters.

Figure 3-5 Appearance of optical splitters



1. SPL2803 bracket-mounted optical splitter

SPL9102 bare optical splitter

[Table 3-2](#) describes the configuration principles of optical splitters.

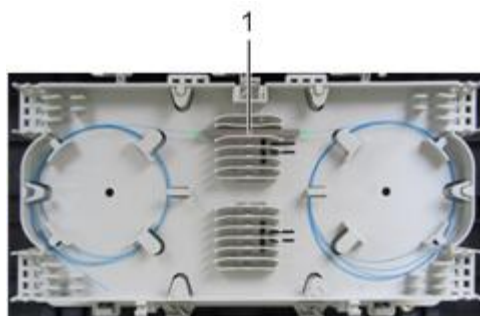
Table 3-2 Configuration principles of optical splitters

Closure model	SSC2132T			SSC2132	
Splitter model	SPL2803			SPL9102	
Split Ratio	1:4	1:8	1:16	1:4	1:8
Maximum Number of Optical Splitters	4	4	2	6	6

3.4 Splicing Tray

Figure 3-6 shows the appearance of the splicing tray.

Figure 3-6 Splicing tray (with an bare optical splitter)



1. SPL9102 bare optical splitter

- Each splicing tray supports a maximum of 24 cores.
- The splicing tray can integrate an SPL9102 bare optical splitter.
- The splicing tray can route cables from four directions, the routing is flexible.
- The splicing tray has a large space for storing optical fibers.

3.5 Fittings for Sealing and Securing Optical Cables

Cable Hole

The aerial closure has four cable holes on the right side and four on the left side, leading in eight optical cables. The cable holes are sealed with gaskets. Figure 3-7 shows the appearance of cables holes on the aerial closure.

Figure 3-7 Cable holes



1. Pressure plate for optical cable

2. Sealing gasket

3. Washer

- Each sealing gasket provides silk screens for cable diameters. Cut the corresponding plate from the sealing gasket according to the diameter of the cable to be led in.
- The cable diameters supported range from 7.6 mm to 22 mm.

Optical Cable Fastener

Each optical cable fastener is able to secure an optical cable and a strength member. [Figure 3-8](#) shows the appearance of the optical cable fastener.

Figure 3-8 Optical cable fastener

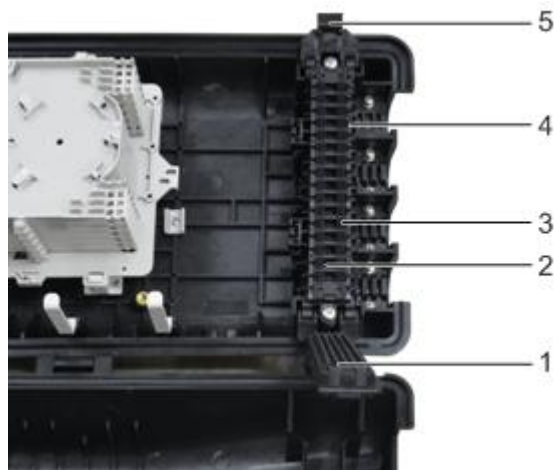


- Optical cables and strength members can be secured outside the closure. After securing them, clamp the optical cable together with the fastener into the closure.
- The number of fasteners is determined by the number of optical cables required.
- The fastener is compact and takes a small space.

Pressure Plate for Flat Drop Cables

The aerial closure has one pressure plate for drop cables on the left side and one on the right side. Each pressure plate provides 16 cable holes inside, leading in 32 drop cables in total. [Figure 3-9](#) shows the appearance of the pressure plate for drop cables.

Figure 3-9 Pressure plate for drop cables



1. Upper pressure plate 2. Cable hole 3. Gasket 4. Lower pressure plate 5. Buckle

- The pressure plate supports flat drop cables with fixed dimensions of 2 mm x 3 mm or 2 mm x 5 mm, or round drop cables with a fixed diameter ranging from 4 mm to 7 mm.
- The pressure plate has a gasket and therefore is well sealed.
- The drop cables are clamped for securing (which is convenient), unlike the traditional operation of routing drop cables through the sealant.
- Drop cables can be led in and secured without tools, facilitating the working at heights for new user access.

(Optional) Fastener for Round Drop Cables

The fastener for round drop cables is configured when leading in and securing round drop cables. [Figure 3-10](#) shows the appearance of the fastener for round drop cables.

Figure 3-10 Fastener for round drop cables



1. Fastener for round drop cables

- The patented design achieves fiberglass-reinforced plastics (FRP) securing without any tools.

3.6 Aerial Accessories

The steel wire rope with the diameter from 5 mm to 10 mm can be lead through the aerial accessories. [Figure 3-11](#) shows the appearance of the aerial accessories.

Figure 3-11 Aerial accessories



- Two W-shaped holes (a large one and a small one) are provided. Select a proper one based on the thickness of the steel wire rope.

- When the diameter of the steel wire rope is from 5 mm to 8 mm, select the large W-shaped holes, when the diameter of the steel wire rope is from 8 mm to 10 mm, select the large W-shaped holes.
- The length of the aerial accessories can be adjusted, ranging from 100 mm to 160 mm.

4 Application Scenarios and Configurations

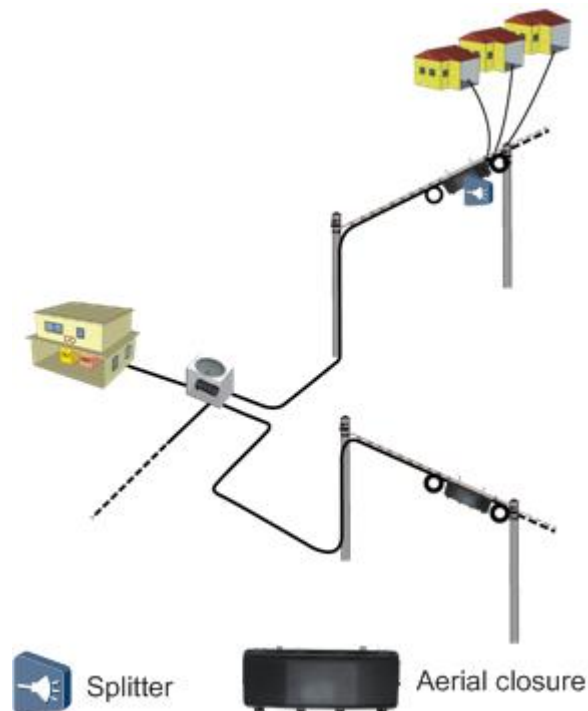
4.1 Overview

Figure 4-1 shows the typical application scenario of the aerial closure.



- Use the aerial closure only in the aerial application scenario to insure the good performance of the aerial closure.
- Install the aerial closure with the guidance in “SSC2132T/SSC2132 Free Breath Aerial Closure Quick Installation Guide”.

Figure 4-1 Typical application scenario of the aerial closure



4.2 Configurations and Routing

Configurations

Table 4-1 describes the typical configurations of the aerial closure.

Table 4-1 Typical configurations of the aerial closure.

Model	SSC2132T-16		SSC2132T-12		SSC2132-12		SSC2132-144	
Function module and quality	<ul style="list-style-type: none"> Bracket-mounted optical splitter Split ratio is 1:8 	Quantity: 2	<ul style="list-style-type: none"> Bracket-mounted optical splitter Split ratio is 1:4 	Quantity: 3	<ul style="list-style-type: none"> Bare optical splitter Split ratio is 1:4 	Quantity: 3	<ul style="list-style-type: none"> Bare optical splitter Split ratio is 1:8 	Quantity: 6
					Splicing tray		Quantity: 3	
Splitter output channels	16		12		12		48	
Distribution capacity (fibers)	16		12		-		-	
Splicing capacity (fibers)	12		12		144		144	



NOTE

This table provides only the quantity of function modules. For details about different models of aerial closures, see the *Packing List*.

Routing of the Aerial Closure with a Bracket-mounted Optical Splitter

Figure 4-2 and Figure 4-3 respectively show the schematic routing diagram and actual routing diagram when the aerial closure integrates with a bracket-mounted optical splitter.

Figure 4-2 Schematic routing diagram (with a bracket-mounted optical splitter)

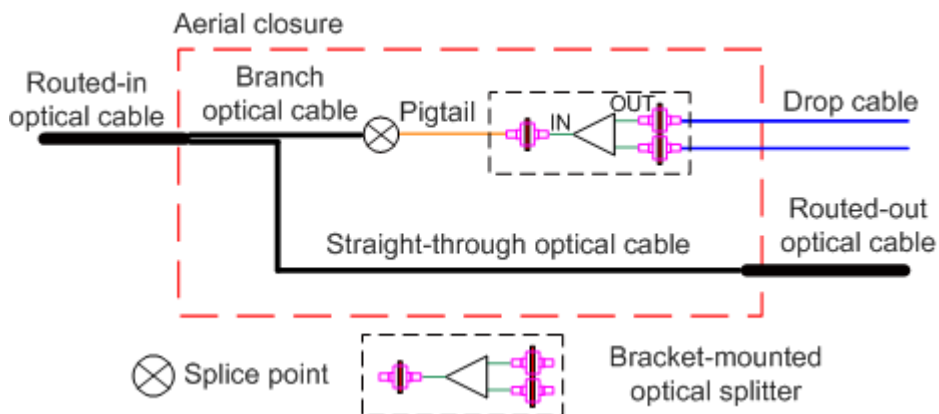


Figure 4-3 Actual routing diagram (with a bracket-mounted optical splitter)



Routing of the Aerial Closure with a Bare Optical Splitter

Figure 4-4 and Figure 4-5 respectively show the schematic routing diagram and actual routing diagram when the aerial closure integrates with a bare optical splitter.

Figure 4-4 Schematic routing diagram (with a bare optical splitter)

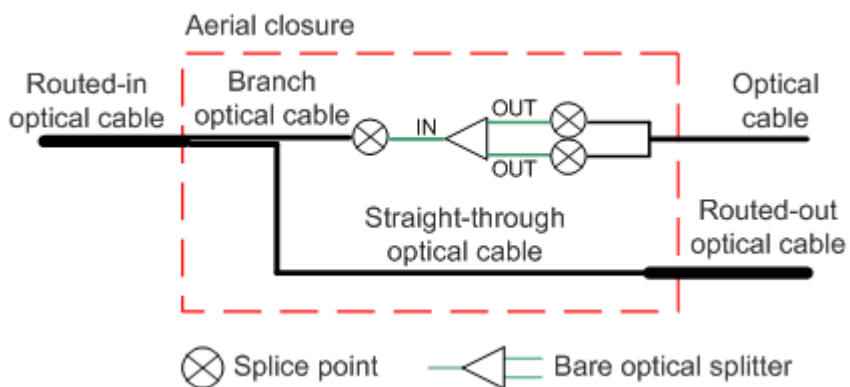


Figure 4-5 Actual routing diagram (with a bare optical splitter)



Routing of the Aerial Closure Without an Optical Splitter

[Figure 4-6](#) and [Figure 4-7](#) respectively show the schematic routing diagram and actual routing diagram when the aerial closure is not configured with any optical splitter.

Figure 4-6 Schematic routing diagram (no optical splitting)

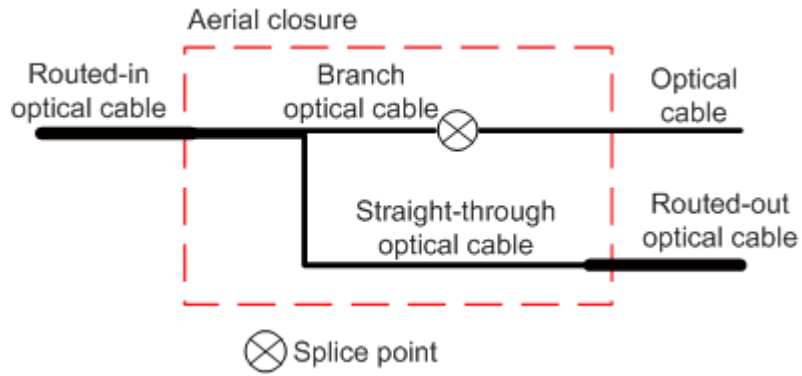


Figure 4-7 Actual routing diagram (no optical splitting)



5 Technical Specifications

Aerial Closure Specifications

Table 5-1 lists the aerial closure specifications.

Table 5-1 Aerial closure specifications

Model	SSC2132T Series	SSC2132 Series
Dimensions (H x W x D)	627 mm x 256 mm x 140 mm	
Packaging dimensions (H x W x D)	764 mm x 316 mm x 224 mm	
Net weight (kg)	3.7	
Gross weight (kg)	5.7	
Splitter output channels	32	48
Distribution capacity (Fibers)	32	N/A
Splicing capacity (Fibers)	12	144
Number of optical cable holes	<ul style="list-style-type: none"> Number of holes for common cables: 8 Number of holes for drop cables: 32 	
Optical cable dimensions	<ul style="list-style-type: none"> Common optical cables with the diameter ranging from 7.6 mm to 22 mm Flat drop cables with the dimensions of 2 mm x 3 mm or 2 mm x 5 mm Round drop cables with the diameter ranging from 4 mm to 7 mm 	
Installation height inside	N/A	
Installation mode	Aerial-mounted	
Materials	Plastic, comply with RoHS	
Color	Black	
Protection level	IP54	

Model	SSC2132T Series	SSC2132 Series
Flame retardant rating	UL94HB	



NOTE

- The splitter output channels, cable distribution capacity, and splicing capacity vary with the number of configured function modules. The values provided in the table are the upper limits of related parameters when the aerial closure is fully configured with function modules.
- The splicing capacity of SSC2132T series is provided by the splicing tray under the flap which is only used to splice and store the input ends of optical splitters and the pigtails.

Configured Product Specifications

Table 5-2 lists the configured product specifications.

Table 5-2 Configured product specifications

Item	Specifications			
Bracket-mounted optical splitter	Model	SPL2803		
	Split Ratio	1:4	1:8	1:16
	Type	Bracket-mounted		
	Dimensions (H x W x D)	130 mm x 100 mm x 25 mm	130 mm x 100 mm x 25 mm	130 mm x 100 mm x 50 mm
	Connector type	No connector		
	Adapter type	SC/APC or SC/UPC		
Bare optical splitter	Model	SPL9102		
	Split Ratio	1:8 or 1:4		
	Type	Bare optical splitter		
	Dimensions (H x W x D)	40 mm x 4 mm x 4 mm (Optical fibers not included)		
	Connector type	No connector		
	Adapter type	No adapter		
Splicing tray	Model	N/A		
	Dimensions (H x W x D)	240 mm x 110 mm x 11 mm		
	Capacity (fibers)	24		

Environmental Specifications

Table 5-3 lists the aerial closure environmental specifications.

Table 5-3 Environmental specifications

Item	Reference Value
Operating temperature	-40°C to +65°C
Storage temperature	-40°C to +65°C
Atmospheric pressure	70 kPa to 106 kPa
Humidity	≤ 93% (+40°C)

Standards Compliance

Table 5-4 lists the intentional standards.

Table 5-4 International standards

Name	Description
IEC 62134-1-2002	Fibre optic enclosures – Part 1: Generic specification
ITU-T L.13	Performance requirements for passive optical nodes: Sealed closures for outdoor environments
ITU.T L.51	Passive node elements for fibre optic networks – General principles and definitions for characterization and performance evaluation
EN 60950-1	Information technology equipment – Safety – Part 1: General requirements
UL94	Test for Flammability of Plastic Materials for Parts in Devices and Appliances
ETSI EN 300 019-2-2	Equipment Engineering (EE); Environmental conditions and environmental tests for telecommunications equipment; Part 2-2: Specification of environmental tests; Transportation
IEC 60529	Degrees of protection provided by enclosures (IP Code)
Bellcore GR-1209-CORE	Generic Requirements for Passive Optical Components
Bellcore GR-1221-CORE	Generic Reliability Assurance Requirements for Passive Optical Components

6 Acronyms and Abbreviations

APC	angle physical contact
FDB	floor distribution box
FTTH	fiber to the home
FRP	fiberglass-reinforced plastics
ODN	optical distribution network
OLT	optical line terminal
ONT	optical network terminal
SC	square connector
UV	ultraviolet